



## THE UNITED STATES VIRGIN ISLANDS

OFFICE OF THE GOVERNOR  
GOVERNMENT HOUSE

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340-774-0001

July 11, 2018

Mr. Ajit Pai  
Chairman  
Federal Communications Commission  
445 12th Street, SW  
Washington, DC 20554

**Re: Support for viNGN and Telecommunication Providers in the U.S.  
Virgin Islands—*In the Matter of the Connect USVI Fund, WC Docket  
No. 18-143***

Dear Chairman Pai:

On behalf of the Government of the U.S. Virgin Islands ("Government"), I provide these comments on the Order and Notice of Proposed Rulemaking adopted by the Federal Communications Commission ("Commission") on May 8, 2018 in the above-referenced proceeding ("Order"). I look forward to further discussions with you and the other members of the Commission on these issues of great importance to your fellow Americans in the U.S. Virgin Islands ("USVI" or "Territory").

### Summary

All telecommunications modes are vital to the USVI. Before the onslaught of Hurricanes Irma and Maria, citizens in this insular possession predominantly relied on cell phones, wireless communication paths, and the Internet. Since the devastation of the storms, more residents than ever before are communicating via these pathways. Wireless devices such as smartphones are becoming the primary portal of communication across our country, and the transition from reliance on landlines has accelerated in the USVI as a result of the severe damage to the telephonic landline infrastructure. As Governor, I urge you to invest the Connect USVI Fund in the way that is optimal for the USVI and all of our citizens. Specifically, the Connect USVI Fund should be used to support our primary communications platform, which consists of wireless networks and the public middle-mile broadband network (viNGN).<sup>1</sup>

As you know, the major cell phone service providers in the Territory are AT&T and Sprint, with Viya now entering the market. The Incumbent Local Exchange Carrier ("ILEC") / Eligible Telecommunications Carrier ("ETC"). Viya, has and continues to receive millions of dollars in

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<sup>1</sup> viNGN, INC., d/b/a Virgin Islands Next Generation Network ("viNGN") is a wholly-owned subsidiary of the Virgin Islands Public Finance Authority, which is an autonomous instrumentality of the Government.

FCC funds in support of its telecommunications services. Recently, Tier 1 Access, the Competitor Local Exchange Carrier (“CLEC”) and ETC, has introduced Voice over Internet Protocol (“VoIP”). Tier 1 Access is one of 14 Internet Service Providers (“ISPs”) that acquire their communication path via viNGN, the Government-owned, federally- and territory-funded, modern, and 100% fiber middle-mile broadband system.

Mr. Chairman, when you visited the Virgin Islands, we discussed the best use of FCC disaster funding to aid in the Territory’s recovery. I stressed the need to support the viNGN fiber optic middle mile, cell phone service infrastructure such as towers, and our more consistent reliance on mobile cell phone service and ISPs, as well as the local landline (fixed) telephone service provider.

Providing a disproportionate share of the Commission’s disaster assistance to a single entity or a landline (fixed) service provider would compound the devastation of the hurricanes and represent a step backward in our collective efforts to improve, modernize, and harden the communications infrastructure in the USVI. I request that the Commission act in a way that truly benefits all of our citizens who rely on telecommunications services via area code 340, whether that service is provided via fixed landline, mobile cell service, or VoIP. I provide below several recommendations on how to allocate the Connect USVI Funding in a manner that strengthens and rebuilds the USVI communications infrastructure in the only sensible way to aid the Territory.

### Discussion

In its Order, the Commission states its intent, through the Connect USVI Fund, to make available (in addition to an immediate infusion of \$13 million for restoration efforts in 2018) up to \$191 million of Stage 2 funding to carrier(s) in the USVI, including \$186.5 million over a 10-year term for fixed broadband, and only \$4.4 million over a 3-year term for 4G LTE mobile voice and broadband in the USVI (Order, ¶ 4, p. 2).

The Commission intends to direct the funding “to target high-cost support over the next several years in a tailored and *cost-effective manner*, using *competitive processes* where appropriate” “for rebuilding, improving, and expanding *broadband-capable networks* in ... the Virgin Islands.” (Order, ¶ 5, p. 2) (emphasis added). To that end, the Commission seeks public comment on how best to structure the \$191 million in Stage 2 funding “to speed longer-term efforts to rebuild fixed and mobile voice and broadband networks in the territories and harden them against future natural disasters.” (*Id.*).

I applaud the Commission for its proposal to provide \$191 million of Stage 2 disaster-related funding to the USVI. However, for the reasons set forth below, certain elements of the proposal, particularly the allocation of funding within the Territory and the terms and conditions of how the funds are to be distributed, if implemented, would fail to achieve the Commission’s stated objectives, could waste federal and territorial dollars, and overall would not serve the public interest. The Government offers several recommendations on how the Commission could modify



its proposal with respect to the USVI to foster robust competition which does not exist at present, invest federal dollars in a cost-effective and sensible manner, maximize the use of—and avoid unnecessary duplication of—the substantial federal and Territorial investments in broadband infrastructure, provide reliable and affordable modern broadband access, harden network(s) against future natural disasters, and better serve the overall public interest goals of the Connect USVI Fund and the needs of the Territory.

### **The Existing Federal and Territorial Broadband Investment in the USVI:**

The Broadband Technology Opportunities Program (“BTOP”) is a major federal initiative that was carried out under the American Recovery and Reinvestment Act of 2009 and administered by the National Telecommunications and Information Administration within the U.S. Department of Commerce, which provided over \$4 billion for the construction or upgrade of approximately 120,000 miles of broadband networks throughout America, including some 70,000 miles of new broadband facilities which were added to the nation's infrastructure. The vast majority of these new broadband facilities were high-speed, high-capacity middle mile infrastructure projects that fulfilled the national goals of extending high speed Internet into unserved and underserved communities that would otherwise lack adequate access to broadband, ensuring that the Internet remains an engine for continued innovation and economic growth, which the federal government has deemed critical to America's competitiveness in the global economy, and addressing many of the nation's most pressing needs, such as improving education, health care, government services, and public safety.

The USVI Government, through the V.I. Public Finance Authority and its wholly-owned subsidiary, viNGN, was awarded \$67.5 million in federal BTOP grants, which, along with the USVI Government's \$35 million local match (including local funds and in-kind contributions of physical assets by the V.I. Water and Power Authority), were used to construct a true high-speed, high-capacity, 100% fiber optic middle mile broadband open-access Internet infrastructure which is capable of delivering Gigabit speeds over some 244 miles of fiber installed throughout the Territory. The viNGN middle mile network consists of three (3) rings of fiber optic cable encircling the main islands (one on St. Thomas, one on St. John, and one on St. Croix), which are then linked by undersea cables connecting St. Thomas to St. John, St. Thomas to Water Island, and St. Thomas to St. Croix, where the viNGN network connects to the national Internet infrastructure at the Global Crossing/Level 3 Communications facility in Frederiksted, St. Croix, which in turn links the Territory to the principal data routes that transport massive amounts of global Internet traffic within and between the countries and continents of the world. As such, the BTOP-funded USVI middle mile network represents the largest single broadband infrastructure investment in the history of the Territory. Any additional (*e.g.*, Stage 2) federal dollars should be used to complement and fortify this visionary federal initiative in order to fulfill its mission of providing affordable consumer access to truly high speed broadband throughout the USVI.

In the Territory, the viNGN network connects over 200 Community Anchor Institutions (“CAIs”), including public and private schools, hospitals and health clinics, public libraries, and



government agencies including first responders (VITEMA, police, and fire services) with reliable, high speed Internet essential for education, public health (including telemedicine and medical records), employment and economic security, and other vital government services including public information, public safety, and emergency response functions. In a Territory geographically isolated from the mainland United States which has experienced significant natural disasters, Government and first responder connections to the viNGN middle mile network are an important component of the federal BTOP project.

The federal BTOP grants also funded the establishment of 33 Public Computer Centers (“PCCs”) by viNGN and programs to encourage broadband use and adoption, especially by traditionally unserved and underserved populations including the poor, the elderly, certain racial and ethnic minorities, those who live in rural areas, and those with disabilities.

The BTOP middle mile backbone was conceived and built as a high capacity, all fiber, open access network in line with the National Broadband Plan’s goal of bridging the digital gap by ensuring that by 2020: at least 100 million American homes have affordable access to actual download speeds of at least 100 megabits per second and actual upload speeds of at least 50 megabits per second; that every American has affordable access to robust broadband service; that every American community has affordable access to service of at least 1 Gigabit per second to CAIs such as schools, hospitals, and government buildings; and to support the public safety of all Americans by implementing technology facilitating first responder access to a nationwide wireless, interoperable broadband and public safety network, national goals which the viNGN network is configured and constructed to achieve. Not only does the viNGN middle mile network conform to the National Broadband Plan goals for speed and connectivity, but it also serves as a vital component of the nation's Communications Sector, which has been designated by the U.S. Department of Homeland Security as a “Critical Infrastructure Sector” consistent with Section 2 of the Homeland Security Act of 2002. As discussed below, conditioning additional (Stage 2) funding on building out last-mile connections to the federally-funded high speed open access middle mile network would support these important federal initiatives and advance the universal service mission of ensuring that consumers in rural, insular and high-cost areas have access to modern truly high speed broadband in a competitive marketplace.

#### **Specific Comments and Recommendations:**

- 1. Stage 2 funding should be more appropriately allocated between fixed and mobile providers to reflect the current (and estimated future) importance of those technologies to all Virgin Islanders**

In its Order, the Commission states its intent to “provide meaningful relief to carriers in the storm ravaged territories in a targeted and cost-effective manner,” and seeks comment on whether its proposed budget is “appropriate ... to rebuild, improve, and expand service in these areas.” (Order ¶ 31, p. 10). The Commission further seeks comment on “how to ensure that service is rebuilt quickly and efficiently, while improving networks where feasible and protecting critical

communications networks against future natural disasters ..., expand service to areas that were unserved prior to the hurricanes ..." (*id.*, ¶ 33, p. 11), and "ensure that people living in the territories have access to reasonably comparable, affordable ... broadband-capable networks (*id.*).

The allocation of Stage 2 funding proposed in the Order is inconsistent with the Commission's stated objectives and the best interests of the residents of the USVI. Of the \$191 million in Stage 2 funding intended for the Territory, the Commission proposes to allocate virtually all—98% (\$186.5 million)—to the sole ETC for fixed service, and only 2% (\$4.4 million) to mobile providers for 4G LTE mobile voice and broadband (Order ¶ 4, p. 2; and ¶ 30, p. 10). However, as noted above, all telecommunications modes are vital to the USVI, and wireless communications devices such as smartphones and the Internet are becoming the primary portals of communication in the Territory. The most prudent use of the Connect USVI Fund would be to support the primary communications platform for our citizens, specifically cell phone service infrastructure such as towers and the public, open-access middle-mile broadband network (viNGN) which provides access to affordable, modern, and reliable broadband, as well as the local landline (fixed) telephone service provider.

**2. Stage 2 funding should be allocated competitively, and more entities should be allowed to compete**

The Commission proposes to distribute the bulk of the Stage 2 funds to the sole Eligible Telecommunications Carrier ("ETC") in the Territory. Providing such funding to a single entity is neither "tailored" nor "cost-effective," as called for in the Order (¶ 5, p. 2), and is non-competitive. Indeed, one of the stated purposes of constructing the BTOP middle mile network was to encourage competition within the USVI market by providing a federally-funded high capacity, high speed open access backbone to which any provider in the USVI could connect. In furtherance of this goal, the Commission should allocate the USVI share of the Stage 2 funds in a more appropriate and fair manner by, for example, setting aside a portion of the funds and allowing other existing entities and/or new (and future) market entrants in the USVI to compete for a share. A more competitive process would avoid distorting the nascent competitive market initiated by the BTOP backbone project, and would generally be fairer and more cost-effective, allow the funding to go farther, and would overall be more appropriate "for rebuilding, improving, and expanding broadband-capable networks in ... the Virgin Islands." (*Id.*). Failure to implement a competitive process—as the Commission contemplates in its Order—would exacerbate the existing lack of robust competition, could create an unreasonable barrier to entry by new (and future) entrants, and would do little to achieve the goals of the National Broadband Plan and BTOP of opening up competition by providing open access to a modern middle mile backbone, or to serve the public interest in creating a competitive consumer marketplace for "last-mile" communications access with higher speeds at lower prices. Further, it would do little to foster the availability of VoIP in the Territory; a service which could offer significant cost savings to businesses, organizations, and individuals.



### **3. Appropriate conditions and restrictions should be imposed on all Stage 2 funding**

The Commission proposes to distribute the substantial amounts of Stage 2 funding, yet it provides insufficient direction as to how that funding can and shall be used. The availability of this funding is a once-in-a-generation opportunity for the USVI to complete the missing link in its broadband system—the “last mile” that will connect residences and businesses to a 100% fiber, high-speed, open access middle-mile network that was built at significant federal and territorial cost as part of an historic infrastructure build-out for the USVI. This opportunity would be wasted if Stage 2 funds are used to build or rebuild a technologically less-advanced legacy infrastructure system (hybrid fiber coaxial, or HFC) that seeks to duplicate, and otherwise does not take full advantage of, the modern, all fiber, high-speed, high-capacity and affordable broadband backbone already made available to the Territory by the federal Government as a result of the visionary BTOP project. Instead of supporting reconstruction of a status quo already determined by NTIA to be insufficient to meet public needs, these funds would be much better spent building out the “last mile” in order to maximize the geographic footprint of the all fiber open access Gigabit broadband backbone in the USVI and the number of households and businesses that will be able to access it and thereby expand broadband coverage in the USVI as called for in the Order (§ 38, p. 11). Accordingly, the Commission should condition the use of the Stage 2 funds to avoid duplication of (and to connect to and use) the federally-funded vINGN open access middle-mile backbone and to require the use of the funding to build out the crucial “last mile” connections from the federally-funded backbone infrastructure which are essential to the fulfillment of the mission of the BTOP grants.

Further, the Commission should specify more robust metrics, or performance standards, that must be achieved by Stage 2 funding recipients. For example, the Commission should require a specific number of new “last-mile” connections (*e.g.*, number of USVI households connected, number of businesses connected) and minimum performance metrics including modern broadband speeds (at least 100 megabits per second (Mbps) and actual upload speeds of at least 50 Mbps, which are substantially faster than the 10/1 or 25/3 Mbps proposed in the Order (§ 60, p. 16)), latency, packet loss, reliability, and other relevant benchmarks.

In addition, the Commission should impose adequate audit and other controls to confirm that the funds are used appropriately and the performance standards are being achieved. The proposed oversight and accountability measures to monitor the use of the funds and ensure their use for intended purposes may be successful in preventing or minimizing waste, fraud, and abuse, but even if successful, these measures will not achieve the Commission’s stated goals and objectives and will not serve the public interest without the additional conditions and requirements proposed herein.

Further, sensible timetables (deadlines) should be included for the build-out of the “last mile.”

**4. The Stage 2 funds should be used in the most cost-effective and prudent manner and not wasted on unnecessary reconstruction or duplication that fails to build on the existing BTOP-funded middle mile and unduly delays expansion of the “last mile”**

The federally-funded viNGN open access middle-mile network provides world-class, modern, reliable, and affordable broadband in the Territory with capacity for Gigabit speeds. The viNGN network has already proven to be resilient. While other means of communication in the USVI were down following the two Category 5 hurricanes last fall, viNGN’s free hotspots connected to its middle-mile network provided many residents with their only means of communication with the outside world (and enabled them to use Skype, GoToMeeting, Facebook Messenger, Apple FaceTime, etc. to contact relatives, conduct business, etc.). An additional infrastructure build which parallels the middle-mile system in the Territory would not provide better (more reliable, faster, less expensive) broadband than already available through the BTOP high capacity, all fiber viNGN middle-mile network. Another layer of redundancy using less robust technologies with outdated performance is not needed, would be a poor allocation of scarce federal dollars, and thus would be contrary to the Commission’s “commitment to fiscal responsibility to ensure that funds are targeted efficiently.” (Order ¶ 38, p. 11).

Further, building another layer of redundancy using less robust technologies would divert funding and resources away from—and thereby unnecessarily delay—the build-out of the “last mile” in the Territory, contrary to the Commission’s “aim of providing support quickly and efficiently to speed the rebuilding, improvement, and expansion of service” and its goal that “people in the territories have access to reasonably comparable, affordable ... broadband-capable networks.” (*Id.*).

In light of the significant federal initiative to install a state of the art all fiber middle mile backbone, tying the funding to building out the “last-mile” is the more sensible, cost-effective, quickest, and most beneficial use of the Stage 2 dollars, and is the path forward which best embodies the universal service goal of ensuring public access to truly high speed broadband for the USVI at competitive prices.

**Conclusion**

I appreciate this opportunity to comment on the Commission’s proposal, and look forward to working with the Commission in building out the crucial “last-mile” of broadband in the U.S. Virgin Islands and improving and hardening mobile communications systems.

The allocation of the Connect USVI Funds in a manner that strengthens and rebuilds the Territory’s communications infrastructure is the only sensible way to aid the Territory. I am scheduling a trip to the nation’s capital in a few weeks and will seek an audience with you to discuss this most important matter.

*Letter to Honorable Ajit Pai, Chairman*

*Federal Communications Commission*

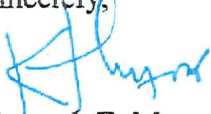
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Thank you for your time and attention to the U.S. Virgin Islands.

Sincerely,



Kenneth E. Mapp  
Governor